## REMARKS

The applicant respectfully requests reconsideration in view of the amendment and the following remarks. Support for newly added claims 11-14 can be found in the specification at page 7, lines 11-17. Support for newly added claims 15 and 16 can be found in the specification at page 7, lines 20-25. Support for newly added claims 17-24 can be found in the specification at page 7, lines 8-10. Support for newly added claims 25 and 26 can be found in the specification at page 6, line 26. No new matter has been added.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas et al (US 5,300,575) ("Jonas") in view of Moehwald (US 4,728,399) ("Moehwald"). The applicant respectfully traverses this rejection.

Jonas discloses a polymerization of 3,4-alkylenedioxy-thiophenes, wherein 3,4-alkylenedioxythiophene, a polyacid , an oxidizing agent, and, if necessary, strong inorganic acids are dispersed in water (wherein the strong inorganic acid lowers the pH-value of the reaction mixture). Further, Jonas describes that the oxidizing agents typically used for the polymerization of thiophene derivatives are oxidizing agents being utilized for the oxidative polymerization of pyrrole. As the Examiner has correctly recognized Jonas does not disclose the use of peroxodisulfuric acid as an oxidizing agent.

Moehwald relates to the preparation of laminates of metals and electrically conductive polymers (see the title). Moehwald describes inter alia the polymerization of pyrrole by using an oxidizing agent (see col. 2, lines 14-24). Oxidizing agents which have proven to be particularly useful are peroxoacids, such as peroxodisulfuric acid (col. 3, lines 3-5).

The Examiner argues that the combination of the teachings of Jonas and Moehwald would result in the applicant's claimed invention as by using peroxodisulfuric acid as oxidizing agent the pH-value is lowered to control the polymerization rate. The applicant respectfully does not agree with the Examiner that by decreasing the pH-value the polymerization can be controlled.

An important feature of the applicant's claimed invention is that a low pH-value (1 .5 or less) leads to an increased conductivity and an improved transparency of films containing an aqueous dispersion produced according to the applicant's claimed methods (see claims 7-10 and

table 1 and page 20 of the specification). One of ordinary skill in the art would not expect the applicant's results with respect to transparency and conductivity when such a low pH-value is used for carrying out the reaction. The pH-value is adjusted by adding an acid to the reaction mixture. The advantageous effect of adding an acid to the reaction mixture is established when comparing Example 13 or Example 14 with Examples 15-18 or Comparative example 3 in Table 2. In these examples, peroxodisulfuric acid or sodium peroxodisulfate is used as oxidizing agent but in Examples 14-18 additional acids are added. These additional acids lead to an increased conductivity, i.e. an additional acid has a beneficial effect on the conductivity. Preferably peroxodisulfuric acid is used as oxidizing agent as no additional acid is necessary to adjust the desired pH-value, but as shown in Table 2 the addition of another acid does not have any negative effect on the film properties. In contrast, by adding another acid better results are obtained.

By decreasing the pH-value the polymerization rate is being increased. The kinetics of this reaction is very complex and a person of ordinary skill in the art could hardly predict the effect of the kinetics on the end product. Basically, a person of ordinary skill in the art would expect that fast reactions are less selective and hence should lead to more side reactions. In other words, different end products should be obtained having different particle sizes and molar weights. The faster the reaction rate the less controllable is the reaction, i.e. the more side reactions are occurring leading to different end products. Normally, the growth of the particles can not be controlled by having fast reactions, i.e. again different end products are obtained. Summarized, one of ordinary skill in the art would not expect getting an end product having improved properties (excellent transparency and conductivity compared to the aqueous dispersions known in the prior art) by using a strong acid which increases the polymerization rate. On the contrary, based on the above arguments, it is a surprising effect that by increasing the polymerization rate, thereby getting a complex kinetics, the end products do show improved properties compared to the aqueous dispersions known in the prior art. Consequently, the kinetics of this reaction gets quite complex and one skilled in the art could hardly predict the effect of the kinetics on the end product. One of ordinary skill in the art would prefer a controllable reaction, i.e. a slow reaction, to get improved properties of the end product. Therefore, the argumentation of the Examiner is based on hindsight.

In this case it is surprising that the use of a low pH-value has a beneficial effect on the properties of the end product (see conductivity and transparency of the film) — hence the use of peroxodisulfuric acid as an oxidizing agent alone or the use of peroxodisutfuric acid in combination with other acids is not obvious. For the above reasons, this rejection should be withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

A three month extension fee has been paid. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 13077-00158-US from which the undersigned is authorized to draw.

Dated: June 5, 2007

Respectfully submitted,

Electronic signature: /Ashley I. Pezzner/
Ashley I. Pezzner
Registration No.: 35,646
CONNOLLY BOVE LODGE & HUTZ LLP
1007 North Orange Street
P.O. Box 2207
Wilmington, Delaware 19899
(302) 658-9141
(302) 658-5614 (Fax)
Attorney for Applicant